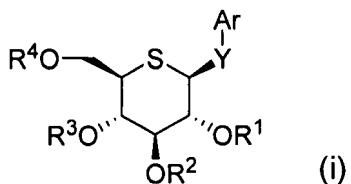


AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. **(currently amended):** A 5-thio- β -D-glucopyranoside compound of the following formula or a pharmaceutically acceptable salt thereof or a hydrate thereof:



{wherein

Y represents -O- or -NH-,

R¹, R², R³ and R⁴, which may be the same or different, each represent a hydrogen atom, a C₂₋₁₀ acyl group, a C₇₋₁₀ aralkyl group, a C₂₋₆ alkoxycarbonyl group, a C₁₋₆ alkoxy-C₂₋₁₀ acyl group or a C₁₋₆ alkoxy-C₂₋₆ alkoxycarbonyl group,

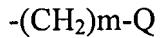
Ar represents an aryl group substituted with -X-A¹, in which the aryl group may further be substituted with the same or different 1 to 4 substituents selected from:

a halogen atom;

a hydroxyl group;

a C₁₋₆ alkyl group which may be substituted with 1 to 4 substituents selected from the group consisting of a halogen atom and a hydroxyl group;

a group represented by the formula:



{wherein m represents an integer of 0 to 4 and Q represents a formyl group, an amino group, a nitro group, a cyano group, a carboxyl group, a sulfonic acid group, a C₁₋₆ alkoxy group which may be substituted with 1 to 4 halogen atoms, a C₁₋₆ alkoxy-C₁₋₆ alkoxy group, a C₂₋₁₀ acyloxy group, a C₂₋₁₀ acyl group, a C₂₋₆ alkoxycarbonyl group, a C₁₋₆ alkylthio group, a C₁₋₆ alkylsulfinyl group, a C₁₋₆ alkylsulfonyl group, -NHC(=O)H, a C₂₋₁₀ acylamino group, a C₁₋₆ alkylsulfonylamino group, a C₁₋₆ alkylamino group, an N,N-di(C₁₋₆ alkyl)amino group, a carbamoyl group, an N-(C₁₋₆ alkyl)aminocarbonyl group, or an N,N-di(C₁₋₆ alkyl)aminocarbonyl group}; or

a C₃₋₇ cycloalkyl group, a C₃₋₇ cycloalkyloxy group, an aryl group, a C₇₋₁₀ aralkyl group, an aryloxy group, a C₇₋₁₀ aralkyloxy group, a C₇₋₁₀ aralkylamino group, a heteroaryl group, or a 4- to 6-membered heterocycloalkyl group, provided that each of these groups may be substituted with 1 to 4 substituents selected from the group consisting of a halogen atom, a hydroxyl group, a C₁₋₆ alkyl group and a C₁₋₆ alkoxy group,

X represents -(CH₂)_n-, -CO(CH₂)_n-, -CH(OH)(CH₂)_n-, -O-(CH₂)_n-, -CONH(CH₂)_n-, -NHCO(CH₂)_n- (wherein n represents an integer of 0 to 3), -COCH=CH-, -S- or -NH-, and

A¹ represents an aryl group, a heteroaryl group or a 4- to 6-membered heterocycloalkyl group, each of which may be substituted with the same or different 1 to 4 substituents selected from:

a halogen atom;

a hydroxyl group;

a C₁₋₆ alkyl group which may be substituted with 1 to 4 substituents selected from the group consisting of a halogen atom and a hydroxyl group;

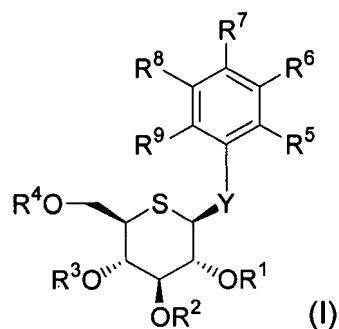
a group represented by the formula:

-(CH₂)^{m'}-Q'

{wherein m' represents an integer of 0 to 4 and Q' represents a formyl group, an amino group, a nitro group, a cyano group, a carboxyl group, a sulfonic acid group, a C₁₋₆ alkoxy group which may be substituted with 1 to 4 substituents selected from the group consisting of a halogen atom and a hydroxyl group, a C₁₋₆ alkoxy-C₁₋₆ alkoxy group, a C₂₋₁₀ acyloxy group, a C₂₋₁₀ acyl group, a C₂₋₆ alkoxycarbonyl group, a C₁₋₆ alkylthio group, a C₁₋₆ alkylsulfinyl group, a C₁₋₆ alkylsulfonyl group, -NHC(=O)H, a C₂₋₁₀ acylamino group, a C₁₋₆ alkylsulfonylamino group, a C₁₋₆ alkylamino group, an N,N-di(C₁₋₆ alkyl)amino group, a carbamoyl group, an N-(C₁₋₆ alkyl)aminocarbonyl group, or an N,N-di(C₁₋₆ alkyl)aminocarbonyl group}; or

a C₃₋₇ cycloalkyl group, a C₃₋₇ cycloalkyloxy group, an aryl group, a C₇₋₁₀ aralkyl group, an aryloxy group, a C₇₋₁₀ aralkyloxy group, a C₇₋₁₀ aralkylamino group, a heteroaryl group, or a 4- to 6-membered heterocycloalkyl group, provided that each of these groups may be substituted with 1 to 4 substituents selected from the group consisting of a halogen atom, a hydroxyl group, a C₁₋₆ alkyl group and a C₁₋₆ alkoxy group}].

2. **(currently amended):** A 5-thio-β-D-glucopyranoside compound of the following formula or a pharmaceutically acceptable salt thereof or a hydrate thereof:



{wherein

Y represents -O- or -NH-,

R¹, R², R³ and R⁴, which may be the same or different, each represent a hydrogen atom, a C₂₋₁₀ acyl group, a C₇₋₁₀ aralkyl group, a C₂₋₆ alkoxycarbonyl group, a C₁₋₆ alkoxy-C₂₋₁₀ acyl group or a C₁₋₆ alkoxy-C₂₋₆ alkoxycarbonyl group, and

at least one of R⁵, R⁶, R⁷, R⁸ and R⁹ represents -X-A¹ (~~wherein X and A¹ are as defined in claim 1~~) and the other, which may be the same or different, each represent:

a hydrogen atom;

a halogen atom;

a hydroxyl group;

a C₁₋₆ alkyl group which may be substituted with 1 to 4 substituents selected from the group consisting of a halogen atom and a hydroxyl group;

a group represented by the formula:

-(CH₂)_m-Q

(~~wherein m and Q are as defined in claim 1~~) wherein m represents an integer of 0 to 4 and Q represents a formyl group, an amino group, a nitro group, a cyano group, a carboxyl group, a sulfonic acid group, a C₁₋₆ alkoxy group which may be substituted with 1 to 4 halogen atoms, a C₁₋₆ alkoxy-C₁₋₆ alkoxy group, a C₂₋₁₀ acyloxy group, a C₂₋₁₀ acyl group, a C₂₋₆ alkoxycarbonyl group, a C₁₋₆ alkylthio group, a C₁₋₆ alkylsulfinyl group, a C₁₋₆ alkylsulfonyl group, -NHC(=O)H, a C₂₋₁₀ acylamino group, a C₁₋₆ alkylsulfonylamino group, a C₁₋₆ alkylamino group, an N,N-di(C₁₋₆ alkyl)amino group, a carbamoyl group, an N-(C₁₋₆ alkyl)aminocarbonyl group, or an N,N-di(C₁₋₆ alkyl)aminocarbonyl group; or

a C₃₋₇ cycloalkyl group, a C₃₋₇ cycloalkyloxy group, an aryl group, a C₇₋₁₀ aralkyl group, an aryloxy group, a C₇₋₁₀ aralkyloxy group, a C₇₋₁₀ aralkylamino group, a heteroaryl group, or a 4- to 6-membered heterocycloalkyl group, provided that each of these groups may be substituted

with 1 to 4 substituents selected from the group consisting of a halogen atom, a hydroxyl group, a C₁₋₆ alkyl group and a C₁₋₆ alkoxy group].

X represents -(CH₂)n-, -CO(CH₂)n-, -CH(OH)(CH₂)n-, -O-(CH₂)n-, -CONH(CH₂)n-, -NHCO(CH₂)n-, wherein n represents an integer of 0 to 3, -COCH=CH-, -S- or -NH-, and A¹ represents an aryl group, a heteroaryl group or a 4- to 6-membered heterocycloalkyl group, each of which may be substituted with the same or different 1 to 4 substituents selected from:

a halogen atom;

a hydroxyl group;

a C₁₋₆ alkyl group which may be substituted with 1 to 4 substituents selected from the group consisting of a halogen atom and a hydroxyl group;

a group represented by the formula:

-(CH₂)m'-Q'

wherein m' represents an integer of 0 to 4 and Q' represents a formyl group, an amino group, a nitro group, a cyano group, a carboxyl group, a sulfonic acid group, a C₁₋₆ alkoxy group which may be substituted with 1 to 4 substituents selected from the group consisting of a halogen atom and a hydroxyl group, a C₁₋₆ alkoxy-C₁₋₆ alkoxy group, a C₂₋₁₀ acyloxy group, a C₂₋₁₀ acyl group, a C₂₋₆ alkoxycarbonyl group, a C₁₋₆ alkylthio group, a C₁₋₆ alkylsulfinyl group, a C₁₋₆ alkylsulfonyl group, -NHC(=O)H, a C₂₋₁₀ acylamino group, a C₁₋₆ alkylsulfonylamino group, a C₁₋₆ alkylamino group, an N,N-di(C₁₋₆ alkyl)amino group, a carbamoyl group, an N-(C₁₋₆ alkyl)aminocarbonyl group, or an N,N-di(C₁₋₆ alkyl)aminocarbonyl group; or a C₃₋₇ cycloalkyl group, a C₃₋₇ cycloalkyloxy group, an aryl group, a C₇₋₁₀ aralkyl group, an aryloxy group, a C₇₋₁₀ aralkyloxy group, a C₇₋₁₀ aralkylamino group, a heteroaryl group, or a 4- to 6-membered heterocycloalkyl group, provided that each of these groups may be substituted

with 1 to 4 substituents selected from the group consisting of a halogen atom, a hydroxyl group, a C₁₋₆ alkyl group and a C₁₋₆ alkoxy group.

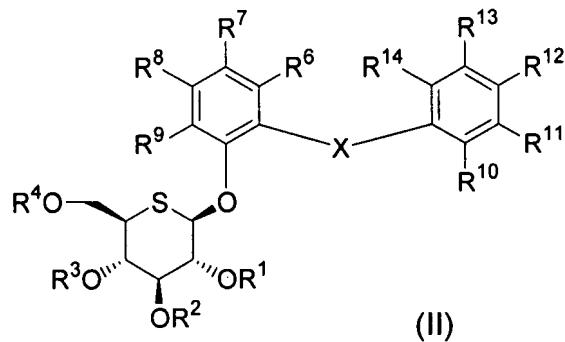
3. **(original):** The 5-thio-β-D-glucopyranoside compound according to claim 2, wherein Y is -O-, or a pharmaceutically acceptable salt thereof or a hydrate thereof.

4. **(currently amended):** The 5-thio-β-D-glucopyranoside compound according to claim 2-~~or 3~~, wherein R⁵ is -X-A¹, or a pharmaceutically acceptable salt thereof or a hydrate thereof.

5. **(currently amended):** The 5-thio-β-D-glucopyranoside compound according to claim 4, wherein X is -(CH₂)_n-₁ (wherein n represents an integer of 0 to 3), or a pharmaceutically acceptable salt thereof or a hydrate thereof.

6. **(currently amended):** The 5-thio-β-D-glucopyranoside compound according to claim 4, wherein X is -CO(CH₂)_n-₁ (wherein n represents an integer of 0 to 3), or a pharmaceutically acceptable salt thereof or a hydrate thereof.

7. **(currently amended):** A 5-thio-β-D-glucopyranoside compound of the following formula or a pharmaceutically acceptable salt thereof or a hydrate thereof:



{wherein

X represents -(CH₂)_n-, -CO(CH₂)_n-, -CH(OH)(CH₂)_n-, -O-(CH₂)_n-, -CONH(CH₂)_n-, -NHCO(CH₂)_n-, (wherein n represents an integer of 0 to 3), -COCH=CH-, -S- or -NH-,

R¹, R², R³ and R⁴, which may be the same or different, each represent a hydrogen atom, a C₂₋₁₀ acyl group, a C₇₋₁₀ aralkyl group, a C₂₋₆ alkoxycarbonyl group, a C₁₋₆ alkoxy-C₂₋₁₀ acyl group or a C₁₋₆ alkoxy-C₂₋₆ alkoxycarbonyl group,

R⁶, R⁷, R⁸ and R⁹, which may be the same or different, each represent:

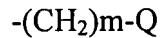
a hydrogen atom;

a halogen atom;

a hydroxyl group;

a C₁₋₆ alkyl group which may be substituted with 1 to 4 substituents selected from the group consisting of a halogen atom and a hydroxyl group;

a group represented by the formula:



{wherein m represents an integer of 0 to 4 and Q represents a formyl group, an amino group, a nitro group, a cyano group, a carboxyl group, a sulfonic acid group, a C₁₋₆ alkoxy group which may be substituted with 1 to 4 halogen atoms, a C₁₋₆ alkoxy-C₁₋₆ alkoxy group, a C₂₋₁₀ acyloxy group, a C₂₋₁₀ acyl group, a C₂₋₆ alkoxycarbonyl group, a C₁₋₆ alkylthio group, a C₁₋₆ alkylsulfinyl

group, a C₁₋₆ alkylsulfonyl group, -NHC(=O)H, a C₂₋₁₀ acylamino group, a C₁₋₆ alkylsulfonylamino group, a C₁₋₆ alkylamino group, an N,N-di(C₁₋₆ alkyl)amino group, a carbamoyl group, an N-(C₁₋₆ alkyl)aminocarbonyl group, or an N,N-di(C₁₋₆ alkyl)aminocarbonyl group}; or

a C₃₋₇ cycloalkyl group, a C₃₋₇ cycloalkyloxy group, an aryl group, a C₇₋₁₀ aralkyl group, an aryloxy group, a C₇₋₁₀ aralkyloxy group, a C₇₋₁₀ aralkylamino group, a heteroaryl group, or a 4- to 6-membered heterocycloalkyl group, provided that each of these groups may be substituted with 1 to 4 substituents selected from the group consisting of a halogen atom, a hydroxyl group, a C₁₋₆ alkyl group and a C₁₋₆ alkoxy group, and

R¹⁰, R¹¹, R¹², R¹³ and R¹⁴, which may be the same or different, each represent:

a hydrogen atom;

a halogen atom;

a hydroxyl group;

a C₁₋₆ alkyl group which may be substituted with 1 to 4 substituents selected from the group consisting of a halogen atom and a hydroxyl group;

a group represented by the formula:

-(CH₂)m'-Q'

{wherein m' represents an integer of 0 to 4 and Q' represents a formyl group, an amino group, a nitro group, a cyano group, a carboxyl group, a sulfonic acid group, a C₁₋₆ alkoxy group which may be substituted with 1 to 4 halogen atoms, a C₁₋₆ alkoxy-C₁₋₆ alkoxy group, a C₂₋₁₀ acyloxy group, a C₂₋₁₀ acyl group, a C₂₋₆ alkoxycarbonyl group, a C₁₋₆ alkylthio group, a C₁₋₆ alkylsulfinyl group, a C₁₋₆ alkylsulfonyl group, -NHC(=O)H, a C₂₋₁₀ acylamino group, a C₁₋₆ alkylsulfonylamino group, a C₁₋₆ alkylamino group, an N,N-di(C₁₋₆ alkyl)amino group, a

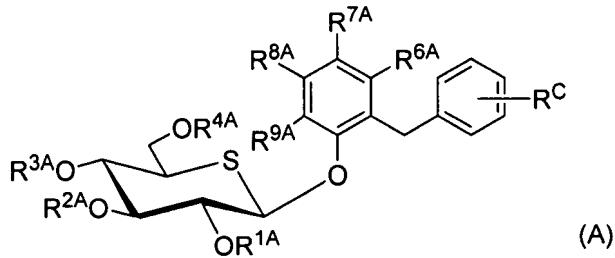
carbamoyl group, an N-(C₁₋₆ alkyl)aminocarbonyl group, or an N,N-di(C₁₋₆ alkyl)aminocarbonyl group}; or

a C₃₋₇ cycloalkyl group, a C₃₋₇ cycloalkyloxy group, an aryl group, a C₇₋₁₀ aralkyl group, an aryloxy group, a C₇₋₁₀ aralkyloxy group, a C₇₋₁₀ aralkylamino group, a heteroaryl group, or a 4- to 6-membered heterocycloalkyl group, provided that each of these groups may be substituted with 1 to 4 substituents selected from the group consisting of a halogen atom, a hydroxyl group, a C₁₋₆ alkyl group and a C₁₋₆ alkoxy group}.

8. **(original):** The 5-thio-β-D-glucopyranoside compound according to claim 7, wherein X is -CH₂-, or a pharmaceutically acceptable salt thereof or a hydrate thereof.

9. **(original):** The 5-thio-β-D-glucopyranoside compound according to claim 7, wherein X is -O- or -NH-, or a pharmaceutically acceptable salt thereof or a hydrate thereof.

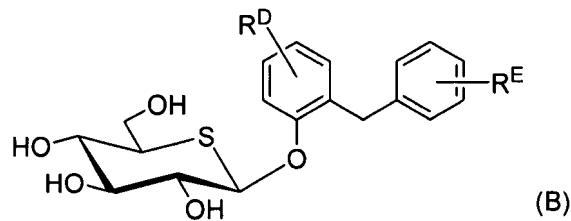
10. **(currently amended):** A 5-thio-β-D-glucopyranoside compound of the following formula or a pharmaceutically acceptable salt thereof:



(wherein R^{6A} to R^{9A}, which may be the same or different, each represent a hydrogen atom, a halogen atom, a C₁₋₆ alkyl group, a C₁₋₆ alkoxy group, a C₁₋₆ alkoxy-C₁₋₆ alkoxy group, a

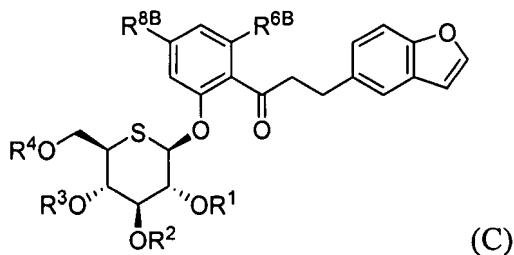
carboxyl group, a C₂₋₆ alkoxycarbonyl group, a hydroxyl group or a hydroxy-C₁₋₄ alkyl group, R^C represents a hydrogen atom, a halogen atom, a C₁₋₆ alkyl group, a C₁₋₆ alkoxy group, a hydroxy-C₁₋₄ alkyl group, a halogen-substituted C₁₋₆ alkyl group or a C₁₋₆ alkylthio group, R^{4A} represents a hydrogen atom, a C₂₋₆ alkoxycarbonyl group or a C₂₋₆ alkanoyl group, and R^{1A} to R^{3A}, which may be the same or different, each represent a hydrogen atom, a C₂₋₈ alkanoyl group or a benzoyl group).

11. (currently amended): A 5-thio-β-D-glucopyranoside compound of the following formula or a pharmaceutically acceptable salt thereof:



{wherein R^D represents a hydrogen atom, a halogen atom, a C₁₋₆ alkyl group or a hydroxy-C₁₋₄ alkyl group, and R^E represents a hydrogen atom, a halogen atom, a C₁₋₆ alkyl group, a C₁₋₆ alkoxy group or a hydroxy-C₁₋₄ alkyl group}.

12. (currently amended): A 5-thio-β-D-glucopyranoside compound of the following formula or a pharmaceutically acceptable salt thereof or a hydrate thereof:



(wherein R¹, R², R³ and R⁴, which may be the same or different, each represent a hydrogen atom, a C₂₋₁₀ acyl group, a C₇₋₁₀ aralkyl group, a C₂₋₆ alkoxycarbonyl group, a C₁₋₆ alkoxy-C₂₋₁₀ acyl group or a C₁₋₆ alkoxy-C₂₋₆ alkoxycarbonyl group, R^{6B} represents a hydrogen atom, a halogen atom, a hydroxyl group, a C₂₋₁₀ acyloxy group, or a C₁₋₆ alkyl or C₁₋₆ alkoxy group which may be substituted with 1 to 4 halogen atoms, and R^{8B} represents a hydrogen atom, a halogen atom or a C₁₋₆ alkyl group which may be substituted with 1 to 4 halogen atoms).

13. (original): A pharmaceutical preparation, which comprises the 5-thio-β-D-glucopyranoside compound according to any one of claims 1 to 12 or a pharmaceutically acceptable salt thereof or a hydrate thereof as an active ingredient.

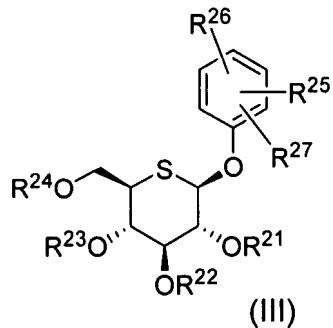
14. (currently amended): The pharmaceutical preparation according to claim 13, which is an inhibitor of A method of treating a condition treatable by inhibiting sodium-dependent glucose transporter 2 activity said method comprising administering to a subject in need of treatment a pharmaceutically effective amount of the pharmaceutical preparation according to claim 13, a pharmaceutically acceptable salt thereof or a hydrate thereof.

15. **(currently amended):** The method pharmaceutical preparation according to claim 14, which is a prophylactic or therapeutic agent for wherein the condition is diabetes, diabetes-related diseases or diabetic complications.

16. **(original):** A pharmaceutical preparation, which comprises the 5-thio- β -D-glucopyranoside compound according to any one of claims 1 to 12 or a pharmaceutically acceptable salt thereof or a hydrate thereof, in combination with at least one drug selected from the group consisting of an insulin sensitizer selected from the group consisting of a PPAR γ agonist; a PPAR α/γ agonist; a PPAR δ agonist; and a PPAR $\alpha/\gamma/\delta$ agonist, a glycosidase inhibitor, a biguanide, an insulin secretagogue, an insulin formulation and a dipeptidyl peptidase IV inhibitor.

17. **(original):** A pharmaceutical preparation, which comprises the 5-thio- β -D-glucopyranoside compound according to any one of claims 1 to 12 or a pharmaceutically acceptable salt thereof or a hydrate thereof, in combination with at least one drug selected from the group consisting of a hydroxymethylglutaryl coenzyme A reductase inhibitor, a fibrate, a squalene synthase inhibitor, an acyl-coenzyme A:cholesterol acyltransferase inhibitor, a low-density lipoprotein receptor promoter, a microsomal triglyceride transfer protein inhibitor and an anorectic.

18. **(currently amended):** A 5-thio- β -D-glucopyranoside compound of the following formula or a pharmaceutically acceptable salt thereof or a hydrate thereof:



{wherein

R²¹, R²², R²³ and R²⁴, which may be the same or different, each represent a hydrogen atom or a C₂₋₁₀ acyl group,

R²⁵ represents an amino group, a C₂₋₆ alkanoyl group, a carboxyl group, a formyl group, a halogen atom, a C₂₋₆ alkoxy carbonyl group or a hydroxyl group, and

R²⁶ and R²⁷, which may be the same or different, each represent a hydrogen atom, a halogen atom, a hydroxyl group, a C₁₋₆ alkyl group which may be substituted with 1 to 4 substituents selected from the group consisting of a halogen atom and a hydroxyl group, or a C₁₋₆ alkoxy group which may be substituted with 1 to 4 halogen atoms).